Maryland Influenza Surveillance Report

Infectious Disease and Environmental Health Administration
Office of Infectious Disease Epidemiology and Outbreak Response

IN THIS REPORT:

Resident Flu Survey	2
Clinical Lab Reports	2
DHMH Lab Reports	2
Flu Hospitalizations	3
Reported Outbreaks	3
ER Visits for ILI	3
Other Flu Indicators	4
CDC Flu Activity	4

Synopsis

Influenza activity in
Maryland continued to
increase during the week
ending October 24, 2009,
and it remains above
levels expected for this
time of the year.
Twenty-nine outbreaks

of influenza or influenza-like illness (ILI), all in institutional settings, were reported last week. Reports from ILINet sentinel

providers and
Maryland residents
continue to point
increased influenzalike illness in the State.
Also, 24 clinical
laboratories reported an
increase in the number of
tests performed and the
proportion of those that
were positive.

Based on these findings, the influenza activity level

in Maryland remains at "widespread", where there are reports of flu activity from all over Maryland.

Outpatient Influenza-Like Illness Surveillance Network

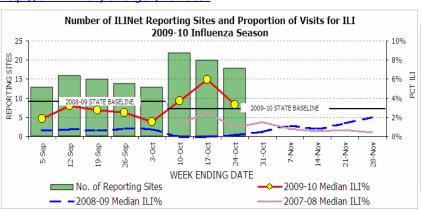
Eighteen sentinel providers reported a median proportion of visits for ILI of 3.6% for last week. This is **above** the state-wide flu season baseline of 2.8% and above what was observed at this time last year. A total of 539 persons with ILI visited the seventeen sentinel providers.

For more information about the ILINet Surveillance Network, visit:

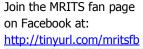
http://dhmh.maryland.gov/fluwatch



Predominant influenza strain in Maryland during week 42: Type A(H1N1) 2009 (formerly "swine flu" or "H1N1 flu")



The median proportion of visits to providers remained above baseline last week, and it continues to be above what is expected in Maryland for this time of the year.





Flu Type	No. of Positives	% of Total
Type A	5,724	96%
Type B	144	2%
Untyped ²	94	2%
TOTAL	5,962	100 %

Number of positive rapid influenza tests by virus type, 2009-10 influenza season

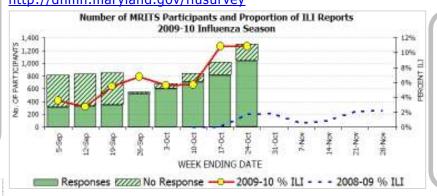
Notes:

 Rapid influenza tests are less accurate when the prevalence of influenza is low.
 Certain rapid influenza test kits do not differentiate between type A and type B viruses

Flu Strain	No. of	% of
	PCR+	Total
	Specimens	
Type	0	0%
A(H1N1)		
Туре	1,151	99%
A(H1N1)		
2009		
Туре	2	<1%
A(H3N2)		
Type B	0	0%
Equivocal	11	<1%
TOTAL	1,164	100%

Maryland Resident Influenza Tracking Survey (MRITS)

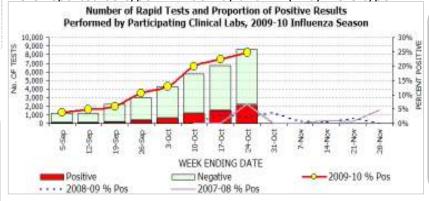
A total of 1,302 Maryland residents were enrolled in the **new** version of the system as of October 28, 2009. Of these, 1,039 (80%) responded to the weekly survey. Of those that responded, 113 (11%) reported flu-like symptoms. For more information on the MRITS, visit: http://dhmh.maryland.gov/flusurvey



There were more respondents this week (1,039) than last week (812), and the percent of those reporting ILI remained steady at 11%, compared to last week.

Clinical Laboratory Influenza Surveillance

A total of 25 clinical laboratories reported 8,677 rapid influenza tests performed last week. Of those tests, 2,470 (25%) were positive, an increase over the previous week (22%). Of the 2,146 positive tests, 2,104 (98%) were reported as type A influenza, and 42 (2%) were type B.^{1, 2}



The total number of tests performed and the proportion of those that are positive have continued to increase above what is expected for this time of the year in Maryland.

The total

samples submitted for testing, and the

number of

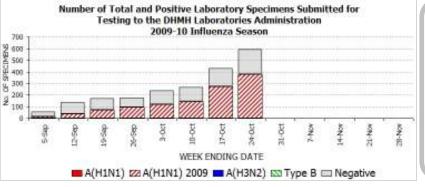
number of

positives,

increased compared to previous weeks.

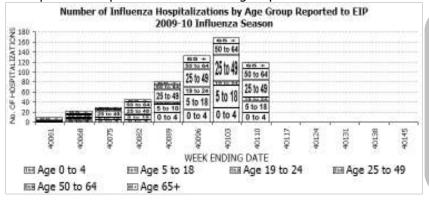
DHMH Laboratories Administration Influenza Testing

Last week, a total of 598 specimens were submitted to the DHMH Lab for influenza testing. Of these, 377 (64%) were positive by PCR technique. All were type A (H1N1) 2009 viruses. For more information, visit: http://dhmh.state.md.us/labs/



Emerging Infections Program Flu Hospitalization Surveillance

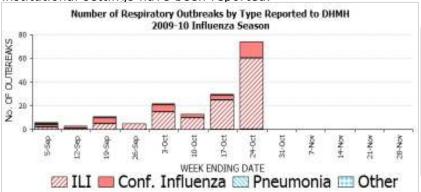
Last week, a total of 149 people were reported hospitalized due to influenza. Those in the 25 to 49 age group constituted the largest section of those hospitalized with 38 reported hospitalizations in that group.



The younger age groups continue to make up most of the reported hospitalizations in Maryland. 2009 H1N1 influenza continues to be the predominant strain in patients hospitalized for influenza.

Reports of Outbreaks in Institutional Settings

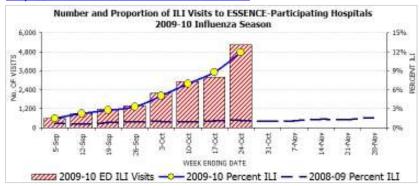
Last week, a total of 74 outbreaks of respiratory illness were reported to DHMH. Sixty were influenza-like illness outbreaks, and 14 were confirmed influenza outbreaks. Since August 30, 2009, a total of 123 outbreaks of respiratory illness in institutional settings have been reported.



The number of reported respiratory outbreaks increased last week (74) compared to the previous week (25). ILI outbreaks are reclassified as flu outbreaks when laboratory confirmation is available.

Emergency Department ILI Reports (ESSENCE)

Last week, a total of 44,175 people visited Maryland emergency departments that participate in ESSENCE. Of those, 5,240 (12%) visits were for flu-like illness. This is proportion is an increase over the previous weeks. ESSENCE is a system monitored by the Office of Preparedness and Response. For more information, visit: http://bioterrorism.dhmh.state.md.us



The number and proportion of visits to emergency departments reporting to ESSENCE increased last week (12%), compared to the previous week (9%).

For information on flu surveillance in states bordering Maryland, visit:

Delaware - http://bit.ly/9Zkp3

D.C. -

http://bit.ly/PNrVo

Pennsylvania http://bit.ly/gqgRF

Virginia -

http://bit.ly/22C4g

West Virginia - http://bit.ly/vtodo

For flu surveillance information for the United States, visit:

http://cdc.gov/flu

Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season (9/22/09 -Centers for Disease Control and Prevention):

http://bit.ly/48L0I4

World Health Organization flu information at:

http://bit.ly/b37z1

OFFICE OF INFECTIOUS DISEASE EPIDEMIOLOGY AND OUTBREAK RESPONSE

201 W. Preston St. Baltimore, MD 21201 Phone:

(410) 767-6700

Fax:

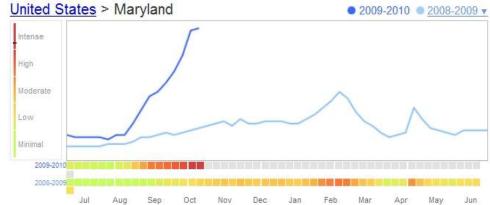
(410) 669-4215

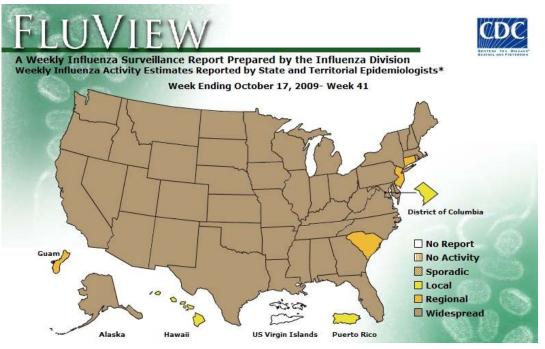
Visit us on the web:

http://dhmh.maryland.gov/

Google Flu Trends & Other Flu Tracking Reports

Google Flu Trends, which monitors on-line queries for flu-related terms, indicates that Maryland's flu activity is now "intense". Over the 2008-09 influenza season, this system closely mirrored established flu surveillance systems for the State. (http://google.org/flutrends)





According to CDC:

"During week 41 (October 11-17, 2009), influenza activity increased in the U.S.

- 4,855 (37.5%) specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories and reported to CDC/Influenza Division were positive for influenza.
- All subtyped influenza A viruses being reported to CDC were 2009 influenza A (H1N1) viruses.
- The proportion of deaths attributed to pneumonia and influenza (P&I) was above the epidemic threshold.
- Eleven influenza-associated pediatric deaths were reported. Nine of these deaths were associated with 2009 influenza A (H1N1) virus infection and two were associated with an influenza A virus for which subtype is undetermined.
- The proportion of outpatient visits for influenza-like illness (ILI) was above the national baseline. All 10 regions reported ILI above region-specific baseline levels.
- Forty-six states reported geographically widespread influenza activity, Guam and three states reported regional influenza activity, one state, the District of Columbia, and Puerto Rico reported local influenza activity, and the U.S. Virgin Islands did not report."